

Memorandum

To: ROBERT OGLESBY
Executive Director

Date: August 2, 2011

Telephone: (916)654-5013

From: **California Energy Commission** -Panama Bartholomy, Deputy Director
1516 Ninth Street
Sacramento CA 95814-5512
Efficiency and Renewable Energy Division

Subject: **POSSIBLE APPROVAL OF THE CITY OF MALIBU'S LOCALLY ADOPTED
BUILDING ENERGY STANDARDS TO REQUIRE GREATER ENERGY EFFICIENCY
THAN THE 2008 BUILDING ENERGY EFFICIENCY STANDARDS**

Summary of Item

The California Public Resources Code establishes a process that allows cities or counties to adopt and enforce locally adopted energy standards that are more stringent than the statewide standards. This process, described in Section 25402.1(h)(2) and the *2008 Building Energy Efficiency Standards*, Title 24, Part 1, Section 10-106 (Standards), allow cities or counties to adopt new versions of the Standards before their statewide effective date (early adoption), require additional energy efficiency measures, or set more stringent energy budgets. The governing body of the city or county is required to make a determination that the standards are cost effective and adopt the findings at a public meeting. The city or county is required to file this determination of cost effectiveness with the California Energy Commission. The Energy Commission must find that the standards will require the diminution of energy consumption levels permitted by the current Standards. The proposed local ordinance cannot be enforced until it is approved by the Energy Commission.

On April 13, 2011, the City Council of the City of Malibu submitted an application for approval for their local energy standards (Ordinance No.357, Local Energy Efficiency Standards) which will meet or exceed the *2008 Building Energy Efficiency Standards (Title 24, Part 6 of the California Building Code)*.

Newly constructed single-family residential buildings must meet all provisions of Title 24, Part 6 and exceed the energy efficiency requirements of Title 24, Part 6 as prescribed in Table 1 using the performance compliance approach.

Table 1
Single-Family Residential Building
Energy Efficiency Requirements

Single-Family Building (Conditioned Square Footage)	Must Exceed Title 24, Part 6 by
Less than or equal to 5,500	15.0 %
Greater than 5,500 and less than or equal to 6,250	18.3 %
Greater than 6,250 and less than or equal to 7,750	23.0 %
Greater than 7,750 and less than or equal to 9,250	27.2 %
Greater than 9,250 and less than or equal to 10,750	30.6 %
Greater than 10,750	31.9 %

Additions to existing single-family residential buildings, where Title 24, Part 6 energy performance documentation is required and is used the “Existing + Addition” or “Existing + Addition + Alteration” calculation method are also required to meet the efficiency requirements of Table 1.

Alterations, combined with any proposed additions, which affect more than 50 percent of the existing floor area (substantial remodels) of an existing single-family residential building where Title 24, Part 6 energy performance documentation is required and the “Existing + Addition” or “Existing + Addition + Alteration” calculation method is used are required to meet the efficiency requirements of Table 1.

Single-family residential buildings that are required by Table 1 to exceed Title 24, Part 6 by more than 15 percent may comply with the portion of the minimum energy efficiency that exceeds Title 24, Part 6 by 15 percent by using a Photovoltaic Credit (PV Credit), which is determined using the Energy Commission CECPV software, or Alternative Design Credit (which includes building energy efficiency, which cannot be modeled using Title 24, Part 6 compliance software, and renewable energy systems other than photovoltaic).

Newly constructed multi-family residential buildings must meet all provisions of Title 24, Part 6 and exceed the energy efficiency requirements of Title 24, Part 6 by 15 percent or more.

Alterations combined with any proposed additions, which affect more than 50 percent of the existing floor area within individual units or the whole building of an existing

multi-family residential building under single ownership (substantial remodel) where Title 24, Part 6 energy performance documentation is required and the “Existing + Addition” or “Existing + Addition + Alteration” calculation method is used are also required to exceed the energy efficiency requirements of Title 24, Part 6 by 15 percent or more.

Newly constructed nonresidential buildings must meet all provisions of Title 24, Part 6 and exceed the energy efficiency requirements of Title 24, Part 6 by 15 percent or more.

Alterations combined with any proposed additions, which affect more than 50 percent of the existing floor area within individual tenant spaces or the whole building of an existing non-residential building under single ownership (substantial remodel), where Title 24, Part 6 energy performance documentation is required and the “Existing + Addition” or “Existing + Addition + Alteration” calculation method is used, are also required to exceed the energy efficiency requirements of Title 24, Part 6 by 15 percent or more.

When an applicant’s chosen compliance requires field verification by a certified Home Energy Rating System (HERS) rater, verification shall be in accordance with the protocols established in the HERS Residential Field Verification and Diagnostic Testing Regulations Manual.

A detailed summary of the proposed local energy standards is provided in Attachment A. The complete application including the full proposed ordinance and cost effectiveness analysis will be made available on the Energy Commission web site upon Energy Commission approval of the proposed ordinance.

Project Manager

Joseph M. Loyer, High Performance Buildings and Standards Development Office.

Summary of Staff Position

Energy Commission staff has found that the application meets all requirements under Public Resources Code Section 25402.1(h)(2) and Section 10-106 of Title 24, Part 1. Energy Commission staff believes that the City of Malibu is to be commended for seeking to achieve the energy savings that result from their local energy ordinance.

The City of Malibu has been informed that the approved ordinance will be enforceable while the *2008 Building Energy Efficiency Standards (Title 24, Part 6 of the California Building Code)* is enforced and upon implementation of new adopted State Standards, the City of Malibu will be required to resubmit an application for local energy standards under Public Resources Code Section 25402.1(h)(2) and Section 10-106 of Title 24, Part 1.

Oral Presentation Outline

Energy Commission staff will provide a brief summary and be available to answer questions if any arise.

Business Meeting Participants

Joseph M. Loyer, High Performance Buildings and Standards Development Office.

Commission Action Requested

Approval of the City of Malibu's locally adopted energy standards that result in more stringent energy requirements than the *2008 Building Energy Efficiency Standards*.

Panama Bartholomy, Deputy Director
Efficiency and Renewable Energy Division

Summary of City of Malibu Ordinance No.357

1. Requirements for Residential Buildings

a. Single-Family Residential Buildings

i. Newly constructed Single-Family Residential Buildings

1. Must demonstrate compliance with Title 24, Part 6¹.
2. Must demonstrate that the building exceeds the energy efficiency requirements of Title 24, Part 6 as prescribed in Table 1:

Table 1

**Single-Family Residential Building
Energy Efficiency Requirements**

Single-Family Building (Conditioned Square Footage)	Must Exceed Title 24, Part 6 by
Less than or equal to 5,500	15.0 %
Greater than 5,500 and less than or equal to 6,250	18.3 %
Greater than 6,250 and less than or equal to 7,750	23.0 %
Greater than 7,750 and less than or equal to 9,250	27.2 %
Greater than 9,250 and less than or equal to 10,750	30.6 %
Greater than 10,750	31.9 %

3. Single-family residential buildings that are required to exceed Title 24, Part 6 by more than 15 percent:
 - a. Must achieve a minimum an energy efficiency exceeding Title 24, Part 6 by 15 percent, and
 - b. May achieve the balance of the requirement (from Table 1) by Photovoltaic Credit (PV Credit) or Alternative Design Credit (energy efficiency or renewable energy system that is not photovoltaic).

ii. Additions and Alterations to Existing Single-Family Residential Buildings

1. Additions to existing single-family residential buildings where Title 24, Part 6 energy performance documentation is required which use the “Existing + Addition” or “Existing + Addition + Alteration” calculation method are also required to meet the efficiency requirements of Table 1.

¹**Title 24, Part 6:** Refers to the 2008 Building Energy Efficiency Standards (Title 24, Part 6) of the California Code of Regulations.

2. Alterations, combined with any proposed additions, which affect more than 50 percent of the existing floor area (substantial remodels) of an existing single-family residential building where Title 24, Part 6 energy performance documentation is required and the “Existing + Addition” or “Existing + Addition + Alteration” calculation method is used are also required to meet the efficiency requirements of Table 1.
 - b. Multi-Family Residential Buildings
 - i. Newly Constructed
 1. Must meet all provisions of Title 24, Part 6.
 2. Must exceed the energy efficiency requirements of Title 24, Part 6 by 15 percent or more.
 - ii. Alterations, combined with any proposed additions, which affect more than 50 percent of the existing floor area within individual units or the whole building of an existing multi-family residential building under single ownership where Title 24, Part 6 energy performance documentation is required and the “Existing + Addition” or “Existing + Addition + Alteration” calculation method is used are also required to exceed the energy efficiency requirements of Title 24, Part 6 by 15 percent or more.

2. Requirements for Non Residential Buildings

- a. Newly Constructed Nonresidential Buildings
 - i. Must meet all provisions of Title 24, Part 6.
 - ii. Must exceed the energy efficiency requirements of Title 24, Part 6 by 15 percent or more.
- b. Alterations, combined with any proposed additions, which affect more than 50 percent of the existing floor area within individual tenant spaces or the whole building of an existing nonresidential building under single ownership where Title 24, Part 6 energy performance documentation is required and the “Existing + Addition” or “Existing + Addition + Alteration” calculation method is used are also required to exceed the energy efficiency requirements of Title 24, Part 6 by 15 percent or more.

3. Other Requirements

- a. When an applicant’s chosen compliance requires field verification by a certified Home Energy Rating System (HERS) rater, verification shall be in accordance with the protocols established in the HERS Residential Field Verification and Diagnostic Testing Regulations Manual.
- b. The City of Malibu has made a written commitment to enforce compliance with their locally adopted energy standard and Title 24, Part 6.